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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,849	03/03/2004	Kunio Moriyama	K2020.0003/P003	1916
24998	7590	10/27/2005	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP			NGUYEN, KIET TUAN	
2101 L Street, NW			ART UNIT	PAPER NUMBER
Washington, DC 20037			2881	

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/790,849	<b>Applicant(s)</b> MORIYAMA ET AL.	
	<b>Examiner</b> Kiet T. Nguyen	<b>Art Unit</b> 2881	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,10 and 12-28 is/are rejected.
- 7) ☒ Claim(s) 8 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/03/04:07/11/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

***Objected Informalities***

The disclosure is objected to because of the following informalities:

**In The Claims**

Claim 28, line 2, "a plurality patients" should be -- a plurality of patients --.

Appropriate correction is required.

***Rejection Under 35 U.S.C. 102(b)***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9-10 and 12-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Britton et al. (5,585,642).

Britton et al. (5,585,642) disclose, in figs. 1-9, a beamline control and security system for a particle beam therapy apparatus. The system includes a charged particle beam generator 11 for generating a charged particle beam; a plurality of treatment rooms 1-5 each having an irradiation unit 20; a first beam transport system 14; a plurality of second beam transport systems each having magnets or electromagnets (see col. 5, lines 66-67) or first shutters 23 and 29 connected in series, communicated between the first beam transport system 14 and the treatment rooms 1-5; a path switching devices 13, 15, 17, 19 and 21 which are double electromagnets or second shutters; a control computer 52 for controlling the first and second shutters to delivery the particle beam in sequence to selected one of the plurality of treatment rooms 1-5; a

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dipole switch controller 60; power supplies A, B and C; an alternatively selecting device which is a mechanical switch (see col. 12, lines 27-42); and a selected treatment room information output device 170 for sensing the information request from the selected room to the computer 52 for controlling the shutters to provide the particle beam to the selected room.

Claims 8 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Reasons for indicating allowable subject matter**

The prior art fails to disclose a particle beam therapy system having a shutter controller for controlling an open state of a first shutter into a closed state when radiation dose detected by a detector provided in a selected treatment room reaches a dose setting value as recited in claim 8; or a second shutter lighter than a first shutter as recited in claim 11.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Hiramoto et al. (6,316,776) disclose a therapy system having a shutter for extracting a beam; and

2) Hartmann et al. (6,736,831) disclose a therapy system having a dose detector.

**Conclusion**

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet T. Nguyen whose telephone number is 571-272-2479. The examiner can normally be reached on Monday-Friday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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KIET T. NGUYEN  
PRIMARY EXAMINER